METHOD FOR REAL-TIME DETECTION OF WHICH UNITS ARE PRESENT ON AN ARCNET

ABSTRACT OF THE DISCLOSURE

The present invention preferably places a hardware circuit between the SCU's ARCNET transceiver and the backplane bus rather than a parallel snooper circuit. This circuit builds the map based on the tokens it observes. When the circuit detects the token for the SCU, it blocks the token transmission to the SCU's ARCNET transceiver. It then sends a minimum length "ping" message to each unit that was present on the bus during the last token rotation, but is not present during the token rotation that just ended. Since units that have lost their token can still respond to a Free Buffer Enquiry message, the circuit can use it as a ping to verify whether the missing unit(s) are actually missing or have just lost their token due to noise. After verification, the token is forwarded to the SCU's ARCNET transceiver.